

Appln No. 09/147,970

Second Supplemental Response dated July 2, 2004

REMARKS

The Examiner has indicated that he would like to see support identified in the specification and drawings for the new independent claims, particularly regarding the feature that non-packeting data are being transferred, and line and column identification in the cited references supporting our arguments distinguishing the references. In this respect, the Applicants provide the following additional remarks.

I. Disclosure of Claims

Claim 35

1. New claim 35 identifies transferring data from a first end terminal to a second end terminal using a first switch and a second switch.

Referring to figures 1 and 2 and the corresponding specification on page 11, line 11 to page 14, line 14, figure 1 discloses transferring data from a first end terminal (telephone 1 or personal computer 2, page 11, line 13) to a second end terminal (telephone or personal computer identified on the right hand side of figure 1, mirroring the structure at the calling party side of figure 1). It is further disclosed using a first switch and a second switch for transferring the data. The first switch in figure 1 is switch 7a and the second switch in figure 1 is switch 7b. For a description of the switches, see also page 13, line 18 to 26.

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2. Feature a) of new claim 35 identifies to locate the first switch between the first end terminal and an access point of a packet-switching network, the first switch being part of a line-switching network or having access to a line-switching network. Support for locating the first switch between the first end terminal and an access point of a packet-switching network can be found on page 13, line 18 to 30. Here, it is stated that switch 7a is not part of the internet and that switch 7a needs to be connected to access point POP 6. Accordingly, switch 7a of figure 1 is located between the end terminal (telephone 1 or personal computer 2) and an access point (POP 6) of a packet-switching network (the internet). The other part of feature a) was already included in the original claim and, accordingly, needs not to be discussed with respect to disclosure. However, please note that switch 7a is connected to the PSTN/ISDN network through exchange point 4.

3. Regarding feature b), according to page 13, lines 25 to 26, switch 7a is connected to an exchange point 4 of a telephone network through a line 8. According to page 13, line 30 to 31, a connection of the switch 7a to POP 6 is carried out through the exchange point 4. Accordingly, the connection is established from the first end terminal (1, 2) to the access point (POP 6) of a packet-switching network via the first switch (7a) through the line-switching network (ISDN/PSTN-network including exchange point 4).

4. Regarding feature c), line-switching transferring of data to the access point of the packet-switching network is

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disclosed in original claim 1, see feature b) of the original English translation of the international application.

Further, line-switching of non-packetized data is disclosed as follows. First, page 11, line 13 of the substitute specification identifies that the data terminal may be, among others, a telephone. Page 13, lines 21 to 25 regarding figure 1 mentions that the switch 7a may have interfaces for connecting telephones (radio telephones, ISDN-telephones, analog telephones). An ISDN telephone or an analog telephone does not provide data in a packetized manner. Instead, the data are non-packetized. Accordingly, the data received by switch 7a and sent to POP 6 are non-packetized data.

In addition, note figure 4 and the disclosure on page 14, line 31 to page 15, line 7 of the specification. According to this description, data coming in through data input 74 of switch 7 can have any source. For example, they may come from an end terminal 1 or 2. Also, it is disclosed that the data input may have for this purpose, among others, an analog interface with A/D converters. It is clear that an analog interface provides data in a non-packetized manner.

Further, the feature that the data may be non-packetized data follows directly from feature c) of claim 1 of the original English translation of the international application. Feature c) of original claim 1 includes the feature of packeting of the data if this does not yet exist as data packets. Of course, packeting of the data only makes sense if the data are not yet packetized, i. e., if the data are non-packetized.

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Lastly, a further disclosure for using non-packetized data is page 16, line 10 expressively mentioning that the incoming data may be a continuous data stream.

While the Examiner refers to page 7 of the specification as appearing to contradict the non-packeting aspect, it should be noted that page 7, lines 16 to 29 discusses sending the data as data packets over the line-switching network. What is described here is a preferred embodiment in the case that the data are originally packetized. In such case, it is convenient to keep the data as data packets even when sending them over the line-switching network. However, as pointed out previously, the application also discloses the embodiment in which the data packets are originally non-packetized and only are packetized when entering the packet-switching network.

5. The remaining features of claim 35 are consistent with the respective features of claim 1 such that it is believed that no additional discussion of their disclosure is required.

The only feature added is that, after changing-over to a line-switching data transfer, the data are transferred from the second switch to the second end terminal. This, however is necessarily the case as a communication between the first end terminal and second end terminal is discussed. Reference is also made to figure 1 where the data are transferred from the second switch 7b to a telephone or a LAN with additional terminals.

#### Claim 55

Regarding new claim 55, the same comments apply as with respect to claim 35. Claim 55 differs from claim 35 in that the structure is omitted that a first switch and a second switch are

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used for transferring the data from the first end terminal to the second end terminal. Features a) to f) of claim 55 correspond to features e) to g) of claim 35.

The only feature with respect to which additional comments appear necessary is feature e) stating that a line-switching connection is established through the line-switching network from the first end terminal to the second end terminal with a presence of the control signal.

For the disclosure of this feature, reference is made to figure 1. End terminals in figure 1 are, e. g., telephone 1 on the left hand transmitting side and the telephone depicted on the receiving right hand side of figure 1. In case a line-switching data transfer through the line-switching network is established from switch 7a to switch 7b, the data between switch 7a and switch 7b are transferred over the line-switching connection. However, as the end terminals are connected either directly (see left hand side of figure 1) or through the ISDN/PSTN network (see right hand side of figure 1) to the respective switches, a line-switching connection is established also between the first end terminal and the second end terminal.

Claim 68

Regarding new claim 68, the following is pointed out:

1. Figure 4 and the description starting page 14, line 25 discloses a switch 7 alias a switching apparatus. It is also disclosed a switching apparatus for routing a telephone call comprising non-packetized data. Page 14, line 34 identifies that the data may receive the switch 7 from an end terminal 1 or 2. The end terminal had been identified before as possibly being an analog telephone or ISDN-telephone, see page 13, line

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24. Further, page 14, line 35 to page 15, line 1 states that the switch may have an analog interface with an A/D converter. Data received from an analog interface are non-packetized data. It is thus disclosed a switching apparatus for routing a telephone call comprising non-packetized data.

2. Regarding the telephone call being from a first end terminal located at a user's premises to a second end terminal located at another user's premises, reference is made to the respective comments with regard to claim 35.

3. Means for establishing a connection through a line-switching network to the second end terminal are the line-switching device 73 of figure 4, see page 15, lines 28 to 31.

4. Means for line-switching transferring data received from the first end terminal over the line-switching network to the second end terminal are also line-switching device 73. See also page 17, line 11 to 14.

5. Means for establishing a connection through a packet-switching network to the second switch is IP-switch 72, see page 15, lines 8 to 11 and page 15, lines 28 to 31. Reference is made also to page 17, lines 11 to 15.

6. Means for packet-switching transferring of data received from the first end terminal over the packet-switching network to the second end terminal are also the IP-switch 72. See page 15, lines 8 to 11.

7. Means responsive to a control signal for transferring to a line-switching transfer or a packet-switching transfer to the second end terminal are a control device 71. See page 16, line 27 to page 17, line 10.

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8. The feature that the means responsive to a control signal change-over to a line-switching data transfer or a packet-switching transfer during the existing transfer with the presence of a control signal is disclosed on page 17, lines 11 to 20. A change-over from packet-switching to line-switching is disclosed on page 7, lines 13 to 15.

## II. Prior Art

The Examiner has also requested line and column indications in the cited reference supporting our arguments distinguishing the references.

Regarding the Jonas-switch not being located between a first end terminal and an access point of the packet-switching network but instead within the access point (POP) of the packet-switching network, reference is made to claims 1 and 10 of that patent indicating that the first and the second router (routers 20, 21) are permanently coupled to the packet-switching network via a packet-switched connection... . Further, reference is made to page 11 of the Supplemental Response filed by the Applicants on June 2, 2004.

Also in Arango, access point 220, 240 are access points of the packet-switching network. In Arango, the switches are located within access point 220, 240 and not between an end terminal and such access point. Further, the matter has been discussed in detail on page 15 of the Supplemental Response.

Regarding transferring of non-packetized data from the first end terminal to the access point of the packet-switching

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network, reference is made to the detailed discussions on pages 3 to 5 of the Supplemental Response.

Further, regarding Arango, reference is made to the definition in column 2, lines 38 to 42 according to which the host which originates a packet is called a source node or source host and a host which terminates a packet is called a destination node or destination host. Accordingly, whenever Arango discusses hosts he is talking about source hosts or destination hosts originating or receiving packets.

Still further, even if Arango discusses using the guaranteed bandwidth network, which may be an ISDN-network and thus a line-switching network, it discusses a transfer of the packets. See, for example, column 7, lines 27 to 31 discussing that after establishing a continuous bandwidth channel on the guaranteed bandwidth network, data are transferred at a particular continuous packet transfer rate. Also, Arango establishes a routing over the guaranteed bandwidth network by means of modifying routing tables which need to look at data packets. See column 12, lines 20 to 52. It is thus inherent with Arango to use data packet.

Regarding the Jonas references, Jonas also identifies a host to be a computer transmitting data packets. See column 1, lines 32 to 45. When Jonas discusses the data transfer between host 1 and 2 with respect to figure 1, he discusses, accordingly, the transfer of data packets between computers. Further, it is referred to column 4, line 38, stating that host applications may include a field in the packet... . The transmission of non-packetized data is alien to those Jonas and Arango.



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The Applicants believe that these remarks should prove helpful to the Examiner as support for the new independent claims in the original document and to distinguish their features over the cited references.

### III. Claims 1 to 34

Regarding pending claims 1 to 34 which include the transmission of packetized data, the Applicants submit that they are distinguishable from the prior art as indicated by the Remarks in our Amendment of March 19, 2004 which accompanied the Request for Continued Examination of the same date.

However, in addition, the Applicants submit that even if the Examiner should not agree that with Jonas and Arango the switch is not located at an end terminal of the user, there is no disclosure in both references that a connection through a line-switching network is established from the first switch to an access point of the packet-switching network. If the Examiner believes that the Jonas switch could be located at an end terminal of the user, then this end terminal would be connected through a packet-switching network to a POP-router. As mentioned before, it is stated in claims 1 and 10 that the router is permanently coupled to the packet-switching computer network. The feature "establishing a connection through a line-switching network from the first switch to an access point of the packet-switching network" would not make any sense even if one assumes that the router/switch of Jonas is located at an end terminal of the user.

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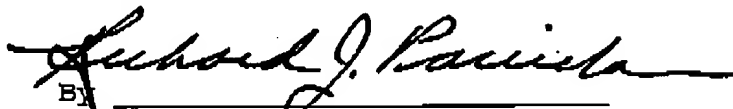
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The same is true for the Arango patent. If one would consider that access points/switches 220, 240 are located at an end terminal, it would not make sense that a connection through a line-switching network is established from such switch to (another) access point of the packet-switching network. The switch/access point is part of packet-switching network, as already the name "access point" implies, and all data would be sent through the packet-switching network.

Accordingly, the Applicants submit that pending claims 1 - 72 are novel and non-obvious over that prior art and that the Application should be in condition for allowance.

Respectfully submitted,

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